

# Missouri/Mississippi River Confluence

## Conservation Opportunity Area



Central Dissected  
Till Plains



*For centuries, people have been drawn to the Confluence and its abundant resources.*

Jim Rathert, Missouri Department of Conservation

In 1721, French explorer Father Pierre Francois de Charlevoix wrote of the confluence of the Mississippi and Missouri rivers, "I believe this is the finest confluence in the world. The two rivers are much the same breadth, each about half a league; but the Missouri is by far the most rapid, and seems to enter the Mississippi like a conqueror, through which it carries its white waters to the opposite shore without mixing them...."

The Missouri/Mississippi River Confluence Conservation Opportunity Area (COA) is the present day floodplain of the Missouri and Mississippi Rivers in Lincoln and St. Charles Counties. Both rivers are major migratory pathways for birds. The Mississippi River corridor is the longest and most traversed migratory route for birds in the northern hemisphere.

During peak migration, ducks, geese, shorebirds, large wading birds, raptors, warblers and other songbirds utilize habitats along the Confluence and the river corridor to rest, refuel and nest.

Large wetland complexes still occur along the Mississippi River and many local citizens are working to conserve the landscape's natural resources. Focusing on the wildlife restoration opportunities following the 1993 and 1995 flood events, citizens and conservation agencies are finding that floodplain landscapes can be restored. Many flood damaged properties have been bought by conservation agencies in the past decade. Restoration projects are showing promise in restoring backwater habitat and other wetland habitats in the Missouri/Mississippi River Confluence COA.

## Missouri/Mississippi River Confluence Conservation Strategies

- Work with willing private landowners and public agencies to restore and conserve natural communities.
- Improve side channel and backwater habitats for aquatic animals.
- Restore areas that are most critical for conserving existing habitats; implement Best Management Practices to reduce runoff and sedimentation problems.
- Encourage local communities to maintain adequate green space to absorb flood waters on Missouri and Mississippi River floodplains.
- Work with local communities to inform and educate; use conservation as an economic stimulus by promoting the area's natural and cultural heritage.
- Improve the quality of life of the citizenry who live, work and recreate in the Missouri/Mississippi River Confluence through educational workshops, festivals, field days, Stream Team participation and expanding recreational opportunities.
- Control invasive exotic plants and animals.



Jim Rathert, Missouri Department of Conservation

*A growing network of natural areas, outdoor recreation and education facilities, and historic sites radiate from the confluence of the Missouri and Mississippi rivers.*

### Priority Research and Inventory Needs

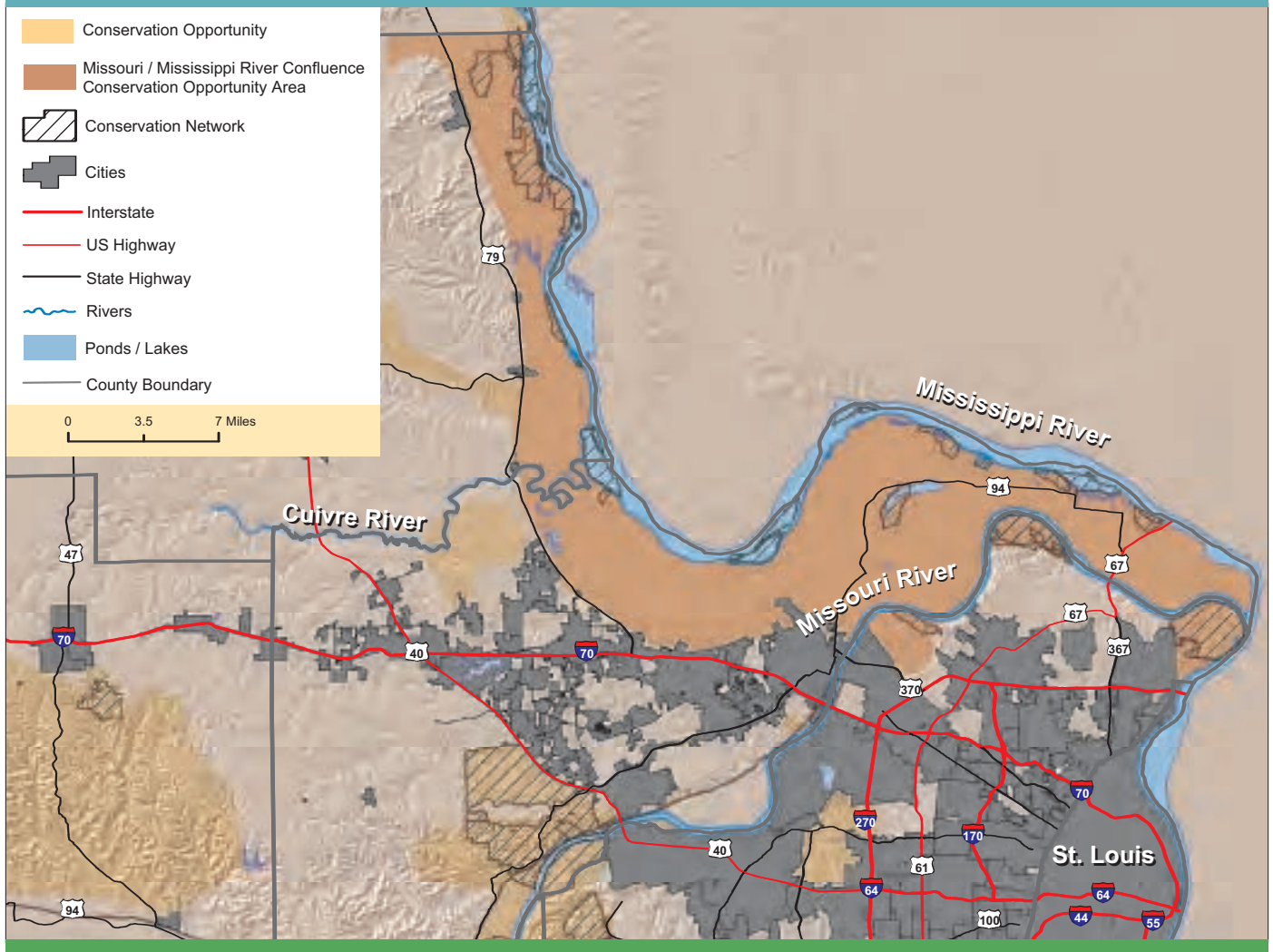
- Gather data on aquatic plants and animals; identify gaps in recent survey work.
- Gather data on wetland birds; look at Breeding Bird Survey data, waterfowl counts and Christmas Bird Count data.
- Build appropriate data layers (e.g., vegetative cover, road crossings, NPDES permits, pesticide use permits).
- Inventory non-native invasive species.
- Conduct topographical survey of levees.

### Conservation Partners

**Existing:** The Nature Conservancy – Missouri Chapter (TNC); Ducks Unlimited (DU); Great Rivers Habitat Alliance; Confluence Greenway; Trust for Public Land; Pheasants Forever (PF); American Land Conservancy; Great Rivers Greenway District; Missouri Waterfowl Association; St. Louis Audubon Society; National Wild Turkey Federation (NWTf); Living Lands and Waters; Upper Mississippi River Conservation Committee; Mississippi Interstate Cooperative Resource Association; Stream Teams; River Resource Action Team; Missouri Botanical Garden; Missouri River Relief; Private Landowners; University of Missouri – Columbia; Southern Illinois University; St. Louis University; St. Charles County Parks and Recreation Department; City of St. Charles Parks & Recreation; St. Louis County Parks & Recreation; King's Lake Drainage District; Lincoln, St. Charles and St. Louis County Soil and Water Conservation Districts (SWCD); Farm Service Agency (FSA); Natural Resources Conservation Service (NRCS); Missouri Department of Natural Resources (DNR); Illinois Department of Natural Resources; Missouri Department of Conservation (MDC); U.S. Fish and Wildlife Service (USFWS); U.S. Department of Agriculture; U.S. Army Corps of Engineers (USACE); U.S. Geological Survey

**Potential:** Audubon Missouri; American Fisheries Society; Upper Mississippi Tallgrass Prairie Joint Venture; Open Space Council; Middle Mississippi River Partnership; Webster Groves Nature Study Society; National Park Service

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## Funding Sources

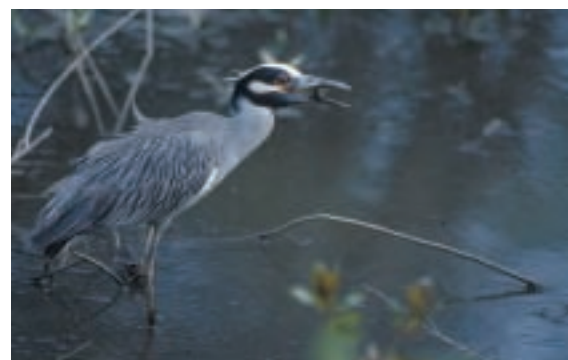
**Existing:** MDC annual budget; DNR annual budget; TNC annual budget; USACE Section 1135 Program; USACE Section 206 Program; USACE Missouri River Mitigation Program; FSA Conservation Reserve Program; NRCS Wetland Reserve Program; NRCS Environmental Quality Incentives Program; NRCS Farm and Ranch Land Protection Program; NRCS Grassland Reserve Program; NRCS Wildlife Habitat Incentive Program; USFWS Partners for Fish and Wildlife Program; USFWS North American Wetlands Conservation Act Grant; DU Conservation Easement Program; PF Wetland Restoration Project; Great Rivers Habitat Alliance restoration annual budget; SWCD State Cost Share Funds; Great Rivers Greenway annual budget; NWTF Wild Turkey Super Fund; The Trust for Public Land annual budget

**Promising Future Sources:** USFWS Non-Game Bird Funds; USFWS Migratory Bird Conservation Fund; Missouri Bird Conservation Initiative Grants; MDC Forest Legacy Program; MDC State Wildlife Grants; MDC Wildlife Diversity Funds; National Fish and Wildlife Foundation Grants; DNR Land and Water Conservation Fund

*Yellow-crowned night-herons are rare summer residents in Missouri. They nest near streams, marshes and wooded wetlands.*

## Existing Conservation Network

Upper Mississippi Conservation Area (Westport Island Natural Area, Norton Wood Access); B.K. Leach Conservation Area; Columbia Bottom Conservation Area; Pelican Island Natural Area (Pelican Island Access); Cuivre Island Conservation Area; Marais Temps Clair Conservation Area; St. Stanislaus County Park; Prairie Slough Conservation Area (Prairie Slough Natural Area); Sandy Island Conservation Area; Upper Mississippi River Waterfowl Area; Edward "Ted" and Pat Jones – Confluence Point State Park; Jefferson National Expansion Monument; Sandy Island Natural History Area; Riverlands Environmental Demonstration Area; Dresser Island Access; Twin River Access; Private Duck Clubs



Jim Rathert,  
Missouri  
Department of  
Conservation



## Flood Protection



*The Confluence is important for floodwater storage. During the flood of 1993, it is estimated that the Confluence held 260 billion gallons of water. Without this storage capacity, communities downstream (including the city of St. Louis) would have been far more affected by flooding.*

Missouri Department of Conservation

## Conservation Challenges

Today, large river systems and their floodplains serve many human interests including agriculture, water supply, commerce, urban expansion, recreation and housing. The Missouri and Mississippi Rivers have been altered by levees, dikes, locks and dams. They are channelized and have few islands, but many sandbars. The health and diversity of native aquatic

and terrestrial plants and animals have been negatively affected. Potential obstacles to conservation success include urban sprawl, public attitude, finding willing private landowners to implement restoration actions, limited funding and staff, highly degraded habitats and lack of education about floodplain issues.

To learn more about the Missouri/Mississippi River Confluence COA, please contact:



Missouri Department of Conservation  
Wildlife Division  
P.O. Box 180  
Jefferson City, MO 65102-0180